25

177 - 179

Notice on the Holotype of *Guairea carnieri* (SCHUSTER) HERBST (Osmundales)

By Rafael Herbst[™])

With 1 text figure

Abstract

A part of the lost Holotype specimen for *Guairea* (formerly Osmundites) *carnieri* (SCHU-STER) HERBST was found in the paleobotanical collection of the Bayerische Staatssammlung für Paläontologie und historische Geologie, Munich, Germany. It bears the collection number AS I 924.

Kurzfassung

In der Bayerischen Staatssammlung für Paläontologie und historische Geologie, München, ist glücklicherweise ein Teil des Holotyps zu *Osmundites carnieri* SCHUSTER erhalten geblieben. Da bereits früher die Art in die neu geschaffene Gattung *Guairea* HERBST übergeführt wurde, ist das Münchner Stück nomenklatorischer Typus zu der Art *G. carnieri* (SCHUSTER) HERBST, die auch Genotyp ist. Der Holotypus wird in der Münchner Sammlung unter der Inventar-Nummer AS I 924 aufbewahrt.

Not long ago the author (HERBST, 1981) had the opportunity of restudying well preserved and complete specimens of the plant originally described as *Osmundites carnieri* by SCHUSTER (1911) which was changed to *Osmundacaulis* by MILLER (1971). The specimens came from the same locality in Eastern Paraguay (Colonia Independencia, Depto. Quairá) as SCHUSTER's, and the age, formerly vaguely defined as "... Jurassic to Tertiary" was definitely fixed as Upper Permian.

The anatomy of this plant was always considered very peculiar among the Osmundaceae, and it could not be closely allied with any of the known species. This is reflected, among other papers, in MILLER's (1971) revision of the whole group of fossil Osmundaceae, where in his fig 6, *O. carnieri* stands quite distinct and separate from the very base of his relationship scheme.

The discovery of another species, quite akin in general structure with *O. carnieri* was the starting point to definitely separate both species first under a new generic name and further as a distinct family among the Osmundales. The major anatomical differences appear to support this procedure.

The type-species of the new family should be the first valid species, but efforts to locate the specimen illustrated by SCHUSTER (1911) failed. This was the case for MILLER and the present author was induced to suppose that the material was lost during World War 1939–1945, and therefore selected as Holotype (following MILLER, op. cit.) the only mentioned existing specimen,

^{*)} Prof. Dr. R. HERBST, Pringepa, Casilla de Correo 128 – 3400 Corrientes – Argentina.



Fig. 1: Holotype for Guairea carnieri (SCHUSTER) HERBST in its present condition; 1/1.

i. e., a thin-section of the KIDSTON Collection in Glasgow, which was cut from the original specimen (KIDSTON & GWYNNE-VAUGHAN, 1914: 469).

Recently, and quite surprisingly, part of the undoubtedly actual specimen illustrated by SCHUSTER (1911, figs 1–3) appeared in the Munich Collection (fig 1). It seems credible that the original piece was cut into two, one of them used to prepare the thinsection (studied by KIDSTON & GWYNNE-VAUGHAN, 1914) and the other remaining unnoticed in the mentioned collection. Therefore this latter specimen should be considered as the Holotype, and eventually the thin-section at Glasgow as a clastotype, but not the holotype as indicated by HERBST (1981).

Two more specimens were also located at the Munich Collection; the suite is listed as follows:

Guairea carnieri (SCHUSTER) HERBST, 1981

Holotype: n° AS 1924; Locality: probably from Mbuvevo, Sierra de Villarrica, Eastern Paraguay (from Schuster, 1911)

Age: Upper Permian (HERBST, 1981); Horizon: Terezina Formation (HERBST, 1981)

Additional specimens: n° 1969 VII 65: no locality known (label states that specimen was acquired at Dr. KRANTZ, Bonn); n° 1972 III 1: no locality known (label states that specimen belonged to Dr. MAGDEFRAUS collection)

It is presumable that both specimens come from the same locality in Paraguay, as outer characters are totally similar to the Holotype and other specimens described by HERBST (1981).

Bibliography

- HERBST, R. (1981): *Guairea milleri* nov. gen. et sp. y Guaireaceae, nueva Familia de las Osmundales (sensulato) del Pérmico Superior de Paraguay. – Ameghiniana, 18: 35–50, lams I–III; Buenos Aires.
- KIDSTON, R. & GWYNNE-VAUGHAN, D. T. (1914): On the fossil Osmundaceae. Part V. Trans. Roy. Soc. Edingbourgh, 50: 469–480; Edinbourgh.
- MILLER, Ch. N. (1971): Evolution of the fern family Osmundaceae based on anatomical studies. Contr. Mus. Paleont. Univ. Michigan, 23: 105–169, lams 1–2, text-figs 1–10; Ann Arbor.
- SCHUSTER, J. (1911): Osmundites von Sierra Villa Rica in Paraguay. Ber. dtsch. Bot. Ges., 29: 534–539, lam XX, text-fig 1–4; Berlin.